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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,365	07/30/2001	Zhi-Li Zhang	45621/FLC/F179	2533

23363 7590 02/22/2007
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EXAMINER

WALSH, JOHN B

ART UNIT	PAPER NUMBER
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2151

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/919,365	ZHANG ET AL.	
	Examiner	Art Unit	
	John B. Walsh	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE of 12/27/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18, 21 and 22 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 6, 10, 11 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 7-9, 12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claims 14-17 recite a computer readable media/medium. There is no antecedent basis in the specification for this term.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 15-17 recite the limitation "computer readable medium" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 2, 5, 6, 10 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. 6,590,867 to Ash et al.

As concerns claim 1, a method for allocating bandwidth within network domain by a network server operably coupled a network domain edge node, comprising: accessing the database (column 1, lines 36-38), the database including path-level data comprising Quality of Service (column 5, line 18; column 2, line 14) information for paths, the paths including a plurality of links for connecting two edge nodes (column 1, lines 42-43), and link-level data (column 1, lines 36-38) comprising QOS information for the links, the path level data being summarized from the link-level data (column 2, lines 6-7); receiving from the network domain edge node a flow request (abstract, lines 1-4) for the path; and satisfying the flow request using path-level data if the network server determines the network server can satisfy the flow request using the path-level data (column 5, lines 35-40); and satisfying the flow request using the link-level data if there is a lack of path-level data and the network server determines the network server cannot satisfy the flow request using the path-level data (column 5, lines 13-34).

As concerns claims 2 and 6, wherein the path-level data includes for each path unused bandwidth allocated to the path and a path state (column 2, lines 5-8) including a critical state and a non-critical state (column 4, table II), the method further comprising satisfying by the flow request using the unused bandwidth if the requested path is not in a critical state and if the requested path has enough unused bandwidth to satisfy the flow request (column 2, lines 5-8).

As concerns claim 5, a method for allocating bandwidth within a network domain by a distributed network server, the distributed network server including a central network server and a plurality of edge network servers, comprising: providing a plurality of path-level databases (column 1, lines 36-38) operably coupled to the plurality of edge network servers, the path-level databases including path-level data (column 1, lines 36-38; multiple routers with each router having a database, therefore multiple databases) comprising Quality of Service (column 5, line 18; column 2, line 14) state information for paths within the network domain; providing a link-level database (column 1, lines 36-38; column 5, lines 30-40; routers have databases for the link and path data) operably coupled to the central network server, the link-level database including link-level data (column 1, lines 36-38) comprising Qos information for links in the paths within the network domain, the path-level data being summarized from the link-level data (column 2, lines 6-7), each of the links connecting two nodes and each of the paths including one or more links (column 1, lines 42-43; links connect nodes over the network); receiving by the distributed network server from a network domain edge node operably coupled to an edge network server a flow request (abstract, lines 1-4) for a path within the network domain; satisfying by the distributed network server the flow request using the path-level data if the network server determines the distributed network server can satisfy the flow request using the path-level data (column 5, lines 35-40); and satisfying by the distributed network server the flow request using the link-level data if the network server determines the distributed network server cannot satisfy the flow request using the path-level data (column 5, lines 13-34).

As concerns claim 10, a data processing system adapted allocate bandwidth within a network domain, comprising: a database (column 1, lines 36-38) including path-level data

comprising Quality of Service information (column 5, line 18; column 2, line 14) for each path within the network domain and link-level data comprising Qos information for each link within the network domain, the path-level data being summarized from the link-level data (column 2, lines 6-7), each of the paths comprising a plurality of links; a processor (inherent server has a processor); and a memory (inherent server has memory) operably coupled to the processor and having program instructions stored therein, the processor being operable execute the program instructions, the program instructions including: receiving from a network domain edge node a flow request (abstract, lines 1-4) for the path; satisfying the flow request using the path-level data if the flow request can be satisfied using the path-level data (column 5, lines 35-40); and satisfying the flow request using the link-level data if the flow request cannot be satisfied using path-level data (column 5, lines 13-34).

As concerns claims 11, wherein the path-level data includes unused bandwidth allocated (column 2, lines 5-8) to the path and a path state, the program instructions further including satisfying the flow request using the unused bandwidth if the path is not in a critical state and the path has enough available unused bandwidth to satisfy the flow request (column 2, lines 5-8).

Response to Arguments

6. Applicant's arguments filed November 29, 2006 have been fully considered but they are not persuasive.

The applicant argues Ash does not disclose "path-level data being summarized from the link-level data".

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Ash discloses this limitation at least at column 2, lines 6-7, column 2, lines 66-67 and column 5, lines 35-40. The path is composed of the links and therefore the data for the path is summarized from the link data.

Allowable Subject Matter

7. Claims 3, 4, 7-9, 12 and 13 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 14, 18 and 20-22 are allowed.

9. Claims 15-17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

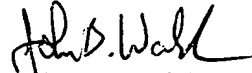
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Thursday from 7:00-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


John B. Walsh
Primary Examiner
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